Attachment 2, Section 6

Easy Blend Batching System (PLC)

EASY BLEND BATCHING SYSTEM

The Easy Blend Batching System combines simple, effective operation with accuracy and versatility. It is designed to meet the needs of your unique concrete products operation. The system can be configured to support multiple mixers and machines. Material transfer timing and control logic are easily customized to maximize the efficiency and production of your plant.

The Easy Blend Batching System automatically controls many plant functions such as weighing the desired materials and charging the mixer. The system interacts with the batch plant by directing and monitoring plant operation. Easy Blend automatically weighs the programmed quantity of material on the plant's scales and charges the mixer with those materials in the programmed mix sequence. Auxiliary devices such as conveyors, hoppers, and dispensers are also controlled and monitored by the system. The Easy Blend Batching System uses both analog and digital inputs/outputs to control and monitor the batch plant operation.

Standard Features

- Automatic control of up to 6 aggregates, 4 cements, multiple admixes and color dispensers.
- Up to 48 mix recipe sequences can be preprogrammed into the system. The operator selects the order that materials enter the mixer and the corresponding mix delay for each step.
- Storage of up to 100 alphanumeric batch recipes. Each recipe contains the weight of each material to be used and the mix recipe that will be followed to mix the batch.
- A full color screen provides quick and easy viewing of plant status and conditions. All information needed by the operator is easily accessible.
- Simple operator interface allows an untrained operator to begin producing in minutes. Typing skills are not required since all interactions are through preprogrammed function keys located on the Allen-Bradley PanelView 1000.
- Function keys are used to perform manual operations and to aid with maintenance.
- The operator can access all screens and enter information without interrupting the production cycle. Accuracy and speed are maintained regardless of activity being performed.
- The set-up screen for selecting each system configuration is protected by a password. A separate password is required before the user can create or modify batch and mix recipes. This prevents unauthorized access to the system and recipe settings.
- Alarms are built into the system to alert the operator of certain conditions. When there is a fault, the equipment will stop operating and the screen will indicate the fault location and a possible solution.
- The system can interface with most moisture control meters such as Le Sueur or Aquamate.
- The system uses the same communication protocol that is used for Besser Plant Integration, Allen-Bradley DH+™.
- Reports are generated using shift data and material usage. These reports can be viewed or printed. Management can use this information as a tool to control cost and keep track of plant efficiency.

BESSER

Controls

- Allen-Bradley SLC 5/04™ processor with PanelView 1000 operator interface.
- Analog and digital inputs/outputs.
- Material level sensing device.
- Integrated Programmable Logic Controller (PLC) allows easy modification and customization, supporting virtually any plant configuration quickly and easily. The PLC is programmed using industry standard ladder logic, allowing easy maintenance by plant personnel.

The system controls are housed in a NEMA12 dust tight enclosure. A line filter eliminates electrical spikes and surges from incoming power. All input points are optically isolated through the input card and each individual output has a circuit breaker for maximum protection. Signals to and from the plant can be monitored on the inputs/outputs status screen.

Specifications

Dimensions/Weight

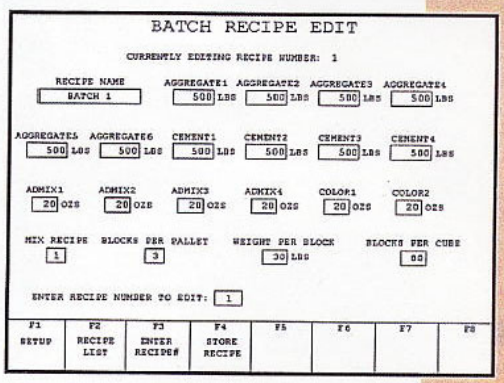
- Width: 3' (900 mm)
- Height: 6' (1800 mm)
- Depth: 1' (300 mm)
- Weight: 325 lbs (146 kg)

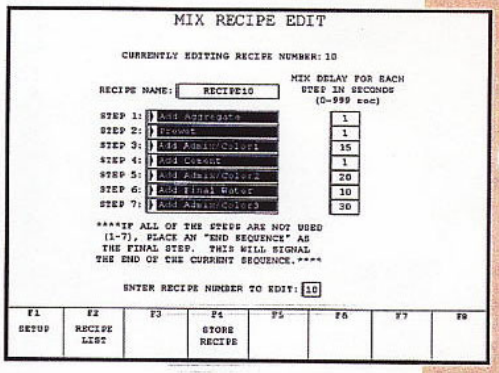
Voltages

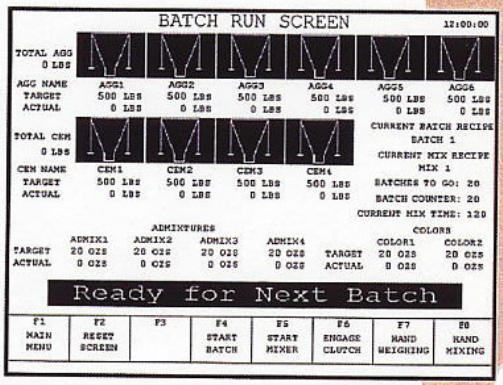
- 120 V., single phase, 50 – 60 Hertz (other voltages available)

Optional Enhancements

- A remote hand control station.
- A moisture probe mounted in the aggregate bin can be used to determine aggregate moisture compensation. Information from the probe is communicated to the batching controls. This allows the aggregate weight to be automatically adjusted which will keep aggregate to cement ratios consistent from batch to batch.
- Easy Mix Moisture Sensing System, microwave mixer moisture control.







Simple and easy to understand screens.

For better viewing, all guards, safety devices and signs are not necessarily shown. Some of the equipment shown or described throughout this brochure is available at extra cost. Since the time of printing, some of the information in this brochure may have been updated; ask your Besser sales representative for details.

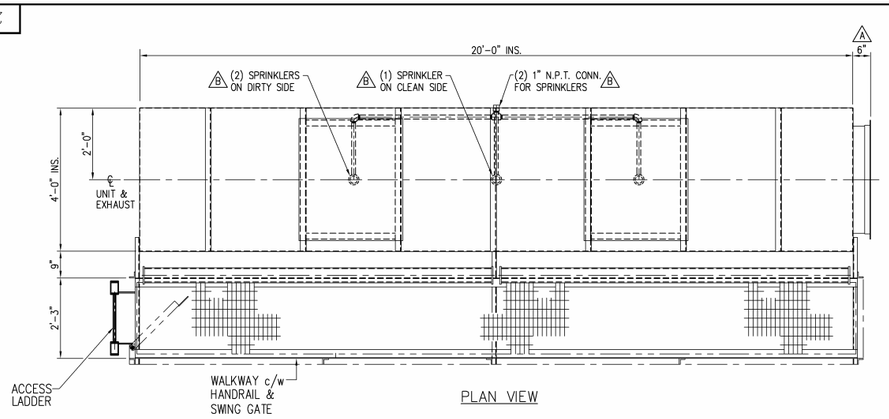
BESSER
801 Johnson Street
Alpena, Michigan 49707 USA
phone: 517-354-4111
fax: 517-354-3120
http://www.besser.com
e-mail: sales@besser.com

IIIEASYBLEND-2500/01-01

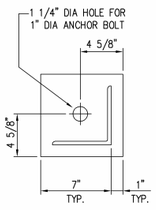
Attachment 2, Section 7

Wheelabrator Air Scavenger System

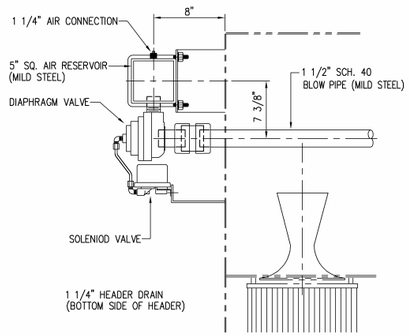
203D1004-B



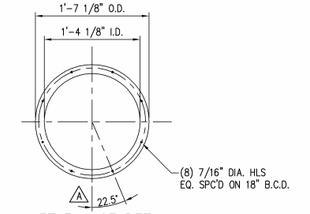
PLAN VIEW



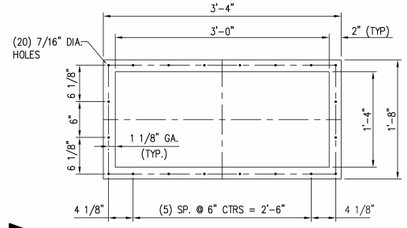
SECTION "A-A"



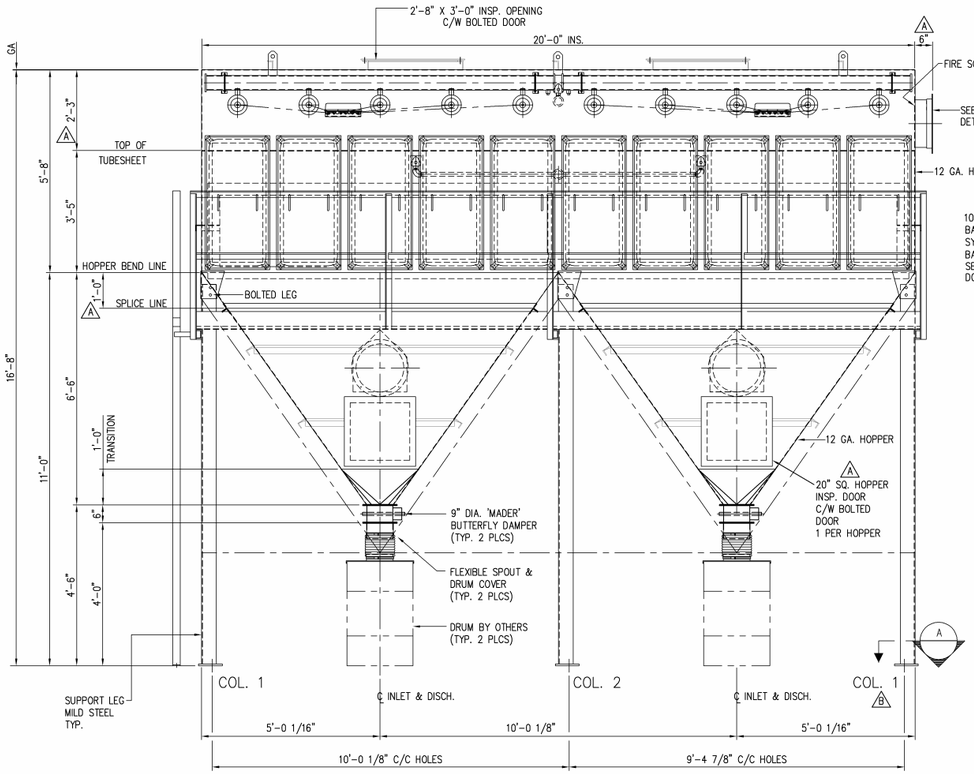
ENLARGED DETAIL "A"



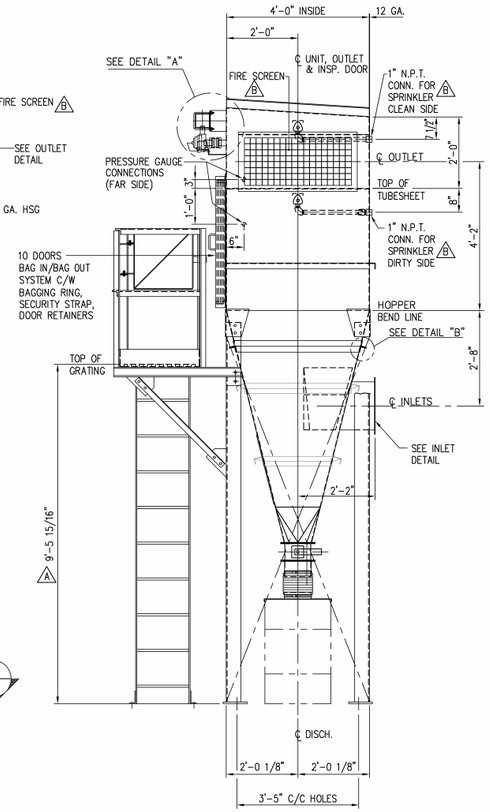
INLET FLANGE DETAIL
(TYPICAL 2 PLCS)



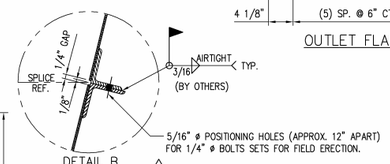
OUTLET FLANGE DETAIL



FRONT VIEW



SIDE VIEW



DETAIL B
TYPICAL SPLICE

OPERATING CONDITIONS

COLLECTOR CONSTRUCTION: 12 GA. MILD STEEL. -15" W.G.
VOLUME (ACFM): 10,000 TO 12,000
GAS INLET TEMPERATURE: 45°F TO 95°F
APPLICATION: CHARGING, MIXING, DISCHARGING OF MIXER
PRODUCT COLLECTED: SOIL, CEMENT & POZZOLANS
LOCATION: OUTDOORS
NUMBER OF CARTRIDGES: 30
VOLUME PER CARTRIDGE (CFM): 333 TO 400
CARTRIDGES: MULTI-PLEATED SUPPORTED POLYESTER WITH PTFE MEMBRANE.
MAX. OPERATING TEMP.: 240°F

FAN DATA:

NORTHERN BLOWER, DESIGN 5020
SIZE 2450, ARRG'T 9, CLASS III
CCW ROTATION, B.A.U. DISCHARGE,
VOLUME: 12,000 ACFM
SPEED: 2,535 R.P.M.
S.P.: 12" B.H.P.: 35.7
TEMP.: 70°F
C/W 40 H.P., 1800 R.P.M.
460/3/60, TEFC MOTOR,
HI - EFFICIENCY

GENERAL NOTES:

1. SEE DRAWING # 83C8095 FOR RECOMMENDED PIPING LAYOUT.
2. DIMENSIONS NOT TO BE USED UNLESS CERTIFIED BY W.C.I. ENGINEERING DEPT.
3. THE FOLLOWING ITEMS ARE SHIPPED LOOSE FOR FIELD INSTALLATION BY OTHERS:
   - PRESSURE GAUGE KIT
   - HEPA FILTERS
   - (2) 9"ø MADER BUTTERFLY DISCH. VALVES
   - CARTRIDGES (30)
   - FAN & MOTOR
   - (1) 22"ø MADER BUBBLE TIGHT ISOLATION DAMPER
   - (2) 12"ø MADER BUTTERFLY DAMPERS
   - SUPPORT STEEL
   - SERVICE PLATFORM
   - (2) 10"ø MADER BUTTERFLY DAMPERS
4. POWER SUPPLY REQ'D:
   120/3/60 (CONTROL)
   460/3/60 (FAN MOTOR)

PAINT SPEC'S:

SURFACES ARE PREPARED TO SSPC-3 CLEANING PRIOR TO PAINTING.
ALL EXTERIOR MILD STEEL SURFACES TO BE PAINTED WITH ONE (1) COAT OF WHEELABRATOR STANDARD PRIMER AND FINISH COAT OF GREY INDUSTRIAL ENAMEL.

NOTE: USE THIS DRAWING IN CONJUNCTION WITH DRAWINGS OF DUCTING, STACK & HEPA FILTER LAYOUT DWG.203D1013, AND ANCHOR BOLT LAYOUT & LOADINGS DWG.203D1137.

AMERICAN FABRICATION INC. W.C.CO. SERIAL # 20-4750

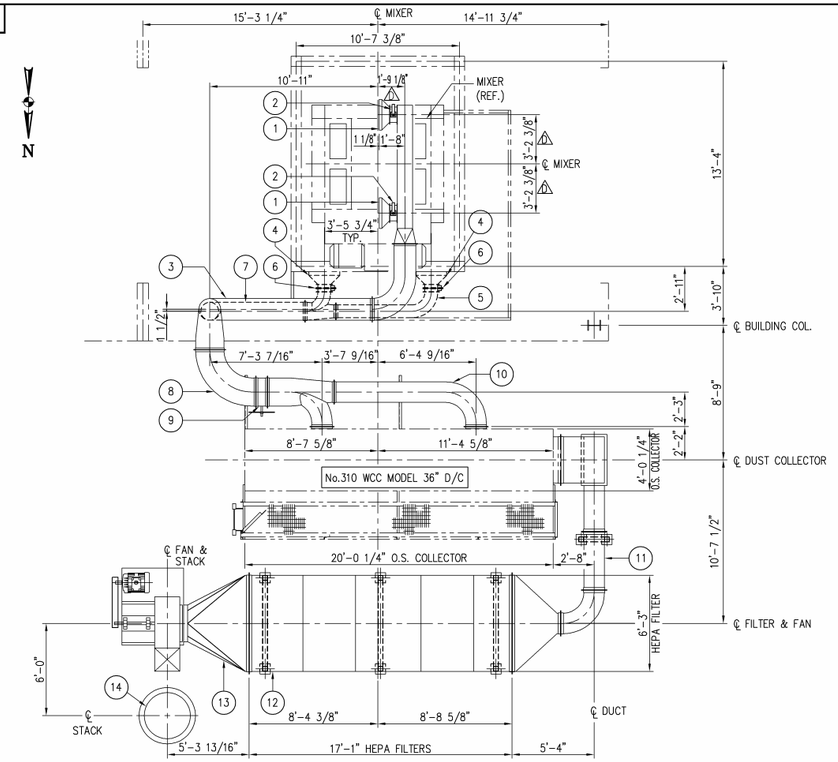
CHG	REVISION	DATE	BY	CHD
G				
F				
E				
D				
C				
B	AS SHOWN	FEB.17,03	W.S.	
A	GENERAL	08JAN03	W.S.	

Wheelabrator
AIR POLLUTION CONTROL

GENERAL ARRANGEMENT, #310 WCC
MODEL 36" DUST COLLECTOR

SCALE	N.T.S.	DRAWN	RDD	TRACED	
DATE	03JAN03	CHECK	W.S.	APPR.	203D1004-B

203D1013-D



VOLUME VELOCITY TABLE

ITEM	INITIAL		MAXIMUM	
	VOLUME (ACFM)	VELOCITY (FPM)	VOLUME (ACFM)	VELOCITY (FPM)
1	2850	950	3565	1187
2	2850	3620	3565	4523
3	5700	3620	7125	4523
4	1950	487	2438	610
5	1950	3578	2438	4472
6	1950	3578	2438	4472
7	3900	3651	4875	4563
8	9600	3639	12000	4548
9	9600	3639	12000	4548
10	4800	3440	6000	4300
11	9600	2560	12000	3200
12	9600	205	12000	256
13	9600	205	12000	256
14	9600	3058	12000	3822

BILL OF MATERIAL

ITEM	SUB ITEM	QTY.	BM/PN	DWG.	DESCRIPTION	UNIT WEIGHT (LBS)	TOTAL WEIGHT (LBS)
1		2		203D1147	12 GA. 1'-6" x 2'-0" HOOD	40	80
2		2	PURCHASE	–	12"ø MADER MANUAL BUTTERFLY DAMPER (A-100-STD FLG.)	100	200
3	3-A	1		203D1147	12 GA. 12"x16" TO 17"ø DUCTING FOR UPPER PICKUP	130	130
	3-B	1				180	180
	3-C	1				80	80
	3-D	1				120	120
4		2		203D1148	12 GA. 2'-0" x 2'-0" HOOD	50	100
5		1		203D1148	12 GA. 10"ø DUCTING	210	210
6		2	PURCHASE	–	10"ø MADER MANUAL BUTTERFLY DAMPER (A-100-STD FLG.)	80	160
7	7-A	1		203D1148	12 GA. 14"ø DUCTING FOR LOWER PICKUPS	100	100
	7-B	1				120	120
	7-C	1				200	200
8		1		203D1149	12 GA. 22"ø DUCTING TO COLLECTOR INLET MANIFOLD	50	100
9		1	PURCHASE	–	22"ø MADER BUBBLE TIGHT MANUAL ISOLATION DAMPER (A-100-STD FLG.)	200	200
10	10-A	1		203D1149	12 GA. 16"ø DUCTING TO COLLECTOR INLETS	180	180
	10-B	1				120	120
11	11-A	2		203D1048	12 GA. 1'-4" x 3'-0" OUTLET DUCT TO HEPA FILTER	200	400
	11-B	1				175	175
	11-C	1				400	400
	11-D	1				200	200
12		1			HEPA FILTER	10,000	10,000
13	13-A	1		203D1048	12 GA. HEPA FILTER INLET & OUTLET TRANSITION	600	600
	13-B	1				600	600
14		1		203D1150	10 GA. 3'-0"ø x 30'-0" HIGH STACK	2,800	2,800
15		1			10 GA. EVASE	400	400
FOLLOWING ITEM # NOT SHOW IN THIS DWG.							
A		1		203D1004	BAG IN/OUT #310 x 36 DUST COLLECTOR (EMPTY)	8,300	8,300
B		30			CARTRIDGES	25	750
C		1			SUPPORT STEEL	3,000	3,000
D		1			LADDER	435	435
E		1			WALKWAY	1,000	1,000
F		2			9" MADER BUTTERFLY DAMPER	100	200
						⚠5 TOTAL	31,490

NOTES:

1. FOR GENERAL NOTES, MATERIAL & PAINT SPEC'S REFER TO G.A. DWG.203D1004.
2. ONE (1) LOT OF ENGINEERING SERVICES WILL BE PROVIDED BY W.C.C. FOR LAYOUT/DETAIL AND DRAWING FOR DUCTWORK, TRANSITIONS, STACK AND SUPPORTS.
3. USE THIS DRAWING IN CONFUNCTION WITH DRAWINGS OF G.A. DWG.203D1004. & ANCHOR BOLT LAYOUR & LOADINGS DWG.203D1137.

AMERICAN FABRICATION INC.
W.C.CO. SERIAL # 20-4750

CHG	REVISION	DATE	BY	CHD
G				
F				
E				
⚠1	ITEM #1 RELOCATED	17MAR03	D.Z.	
⚠2	WEIGHTS ADDED DWNS REVISED	12MAR03	D.Z.	
⚠3	GENERAL	11FEB03	D.Z.	
⚠4	GENERAL	21JAN03	D.Z.	

Wheelabrator
AIR POLLUTION CONTROL

DUCTING, STACK & HEPA FILTER LAYOUT FOR
No. 310 WCC MODEL 36" CARTRIDGE DUST COLLECTOR

SCALE	DRAWN	TRACED	
1/4"=1'-0"	RDD		203D1013-D
DATE	CHECK	APPR.	
08JAN03			

FMT-01-REV 3.4

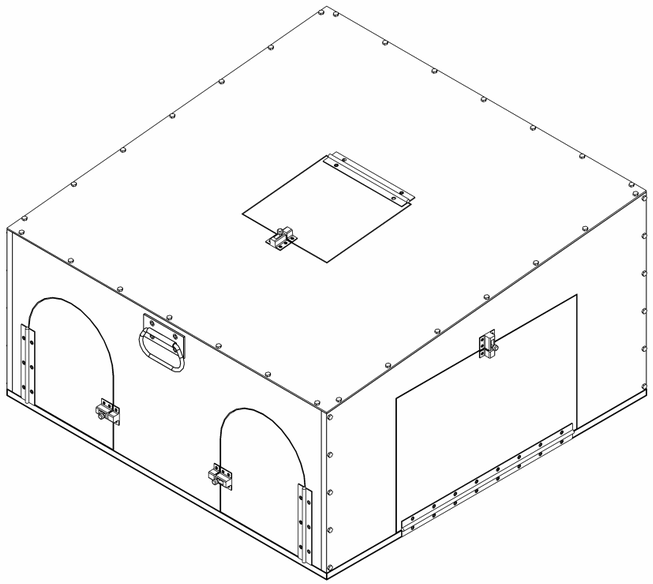
3	2	1	SHEET
–	–	–	REV

REV STATUS OF SHEETS

REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:

NOTES:

1. APPLY CEMENT, ITEM 24 TO ALL JOINTS AND MATING SURFACES TO FORM A TIGHT SEAL. USE ENOUGH SO THAT CEMENT WILL EXTRUDE OUT OF JOINTS SUCH THAT NO CRACKS OR VOIDS ARE LEFT IN THE JOINT. WIPE CLEAN TO LEAVE A SMOOTH CLEAN APPEARANCE INSIDE AND OUTSIDE OF BOX.
2. POSITION HANDLE, ITEM 30 AS SHOWN AND MACHINE 4, #10–24 UNC–2B HOLES THRU FRONT PANEL, ITEM 7 AND BACK PANEL, ITEM 8 USING HOLES IN ITEM 30 AS A TEMPLATE.
3. POSITION HINGE, ITEM 18 AS SHOWN AND MACHINE 2, #6–32 UNC–2B HOLES THRU TOP DOOR, ITEM 15 AND TOP PANEL, ITEM 16 USING HOLES IN ITEM 18 AS A TEMPLATE.
4. POSITION HINGE, ITEM 20 AS SHOWN AND MACHINE 8, #6–32 UNC–2B HOLES THRU SIDE DOOR, ITEM 14 AND SIDE PANEL, ITEM 9 USING HOLES IN ITEM 20 AS A TEMPLATE.
5. POSITION HINGE, ITEM 19 AS SHOWN AND MACHINE 3, #6–32 UNC–2B HOLES THRU FRONT DOOR, ITEM 13 AND FRONT PANEL, ITEM 7 USING HOLES IN ITEM 19 AS A TEMPLATE.
6. CENTRALLY POSITION CATCH, ITEM 29 AS SHOWN ENSURING TO PROPERLY ALIGN THE TWO MATING PARTS. USE HOLES IN ITEM 29 AS A TEMPLATE AND TAP HOLES THRU MATING PARTS. SIZE TAP HOLES TO MATCH FASTENERS SUPPLIED WITH ITEM 29.
7. FIELD LOCATE LANYARD, ITEM 28 TO ALLOW DOOR, ITEM 14 TO OPEN 90° MINIMUM. MACHINE 1, #6–32 UNC–2B HOLE EACH THRU ITEMS 14 AND 28.
8. CUT RUBBER, ITEM 25 TO CONFORM TO DOOR OPENING AS INDICATED IN SECTION C–C. APPLY GLUE, ITEM 26 TO THE .50" AREA OF THE BOX PANEL SIDE ONLY, ENSURING NOT TO APPLY GLUE TO DOOR. POSITION RUBBER, ITEM 25 AS SHOWN.



ISOMETRIC VIEW
SCALE: NONE
DOOR RUBBER OMITTED FOR CLARITY

–4	–3	–2	–1	SAFETY CAT.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL/SPECIFICATION OR VENDOR NAME	ITEM NO.
		QTY REQD						
	4			CG		SCR, FLAT HD PHILLIPS #6–32 UNC–2A X 1/4 LG		39
4		8		CG		SCR, FLAT HD PHILLIPS #10–24 UNC–2A X 1 1/4 LG		38
								37
			28	CG		SCR, FLAT HD PHILLIPS #10–24 UNC–2A X 3/4 LG		36
		4	4	CG		SCR, FLAT HD PHILLIPS #10–24 UNC–2A X 1/2 LG	CS COML GRADE	35
			28	CG		SCR, FLAT HD PHILLIPS #6–32 UNC–2A X 1/2 LG		34
			22	CG		SCR, HEX HD #10–24 UNC–2A X 3/4 LG		33
			28	CG		SCR, HEX HD #10–24 UNC–2A X 3/8 LG		32
			2	CG		SCR, HEX HD #6–32 UNC–2A X 1/2 LG		31

PARTS LIST

–4	–3	–2	–1	SAFETY CAT.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL/SPECIFICATION OR VENDOR NAME	ITEM NO.
QTY REQD								
		1	1	CG	1647A41	HANDLE, SURFACE MOUNT		30
	1		3	CG	1664A2	CATCH, KNOB CABINET	MCMASTER–CARR, CAT. NO. 104	29
			1	CG	92730A15	LANYARD, BEAD CHAIN		28
								27
AR			AR	CG	7567A22	GLUE, LOCTITE SUPER BONDER	MCMASTER–CARR, CAT. NO. 104	26
AR			AR	CG	9455K44	RUBBER, NEOPRENE		25
AR		AR	AR	CG	SC–325	POLYCARBONATE CEMENT	CADILLAC PLASTIC AND CHEMICAL COMPANY	24
								23
								22
								21
			1	CG	–20	SIDE DOOR HINGE	PART MODIFIED FROM MCMASTER–CARR PART NO. 1569A223 CAT. NO. 104	20
			2	CG	–19	FRONT DOOR HINGE		19
	1			CG	–18	TOP DOOR HINGE		18
1				CG	–17	TUBE		17
	1			CG	–16	TOP PANEL	LEXAN, CLEAR 1/8 THK	16
	1			CG	–15	TOP DOOR		15
			1	CG	–14	SIDE DOOR	LEXAN, CLEAR 1/2 THK	14
			2	CG	–13	FRONT DOOR		13
			1	CG	–12	BOTTOM PANEL		12
1				CG	–11	RING		11
			1	CG	–10	SIDE PANEL		10
			1	CG	–9	SIDE PANEL		9
		1		CG	–8	BACK PANEL		8
			1	CG	–7	FRONT PANEL		7
								6
								5
		2		CG	–4	TUBE ASSEMBLY		4
			1	CG	–3	TOP PANEL ASSEMBLY		3
			1	CG	–2	BACK PANEL ASSEMBLY		2
				CG	–1	ASSEMBLY		1

PARTS LIST

DASH NO.	NEXT ASSY
APPLICATION	

DIMENSIONING AND SYMBOLOGY ARE AMERICAN NATIONAL STANDARD
UNLESS OTHERWISE SPECIFIED
SURFACE ROUGHNESS 125/
DIMENSIONS AND TOLERANCES ARE IN INCHES
TOLERANCES: DECIMALS: X = ± .1, XX = ± .03, XXX = ± .010
FRACTIONS ± 1/8
ANGULAR ± 2°
DO NOT SCALE DRAWING

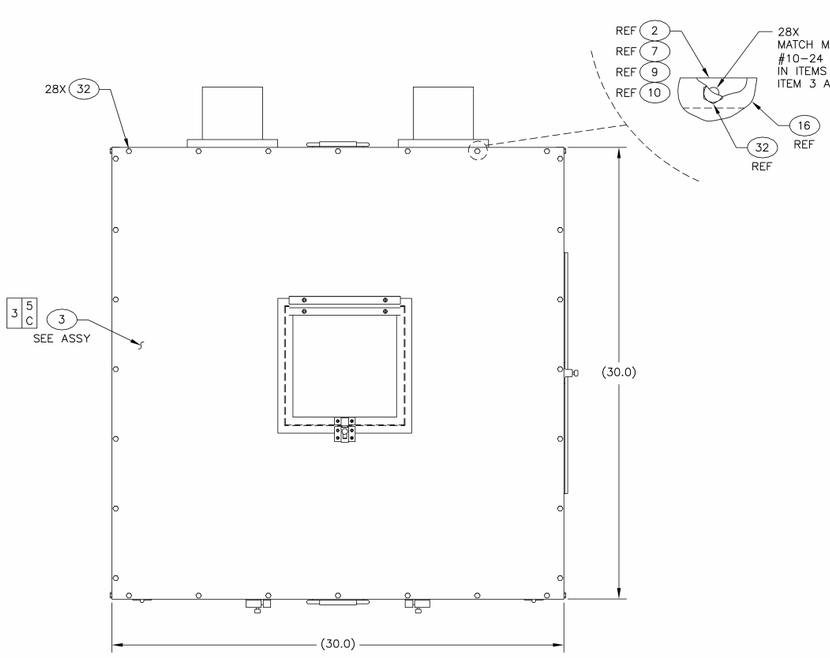
SUBCONTRACT NO. N/A
REQUESTER: PATRICK GIBSON
DESIGN: STEVE MOODY
DRAWN: ROB HERGESHEIMER
PROJECT NO.
SPCL CODE
FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 110252
EFFECTIVE DATE: 10/11/04

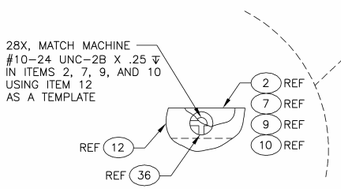
INEEL
Idaho National Engineering & Environmental Laboratory
BECHTEL BWXT IDAHO, LLC

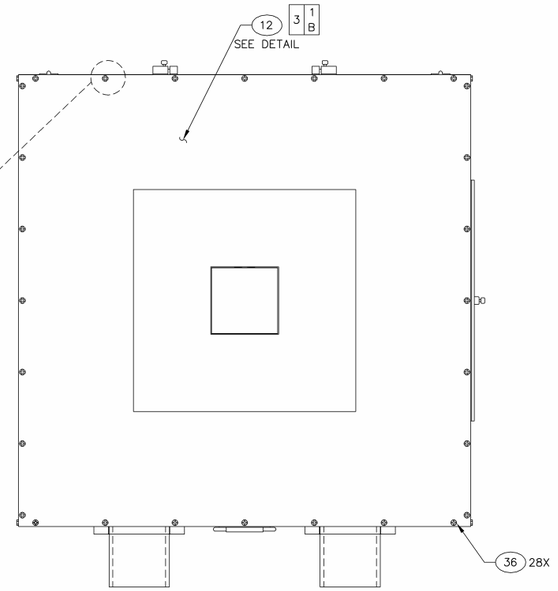
INEEL
DEBRIS TREATMENT INJECTION SYSTEM
CONTAINMENT BOX ASSEMBLY AND DETAILS

SIZE	CAGE CODE	INDEX CODE NUMBER					DWG-626227	REV
		AREA	TYPE	CL	ORIG			
D	01MF3	200	1688	41	090			
SCALE: NOTED							SHEET 1 OF 3	

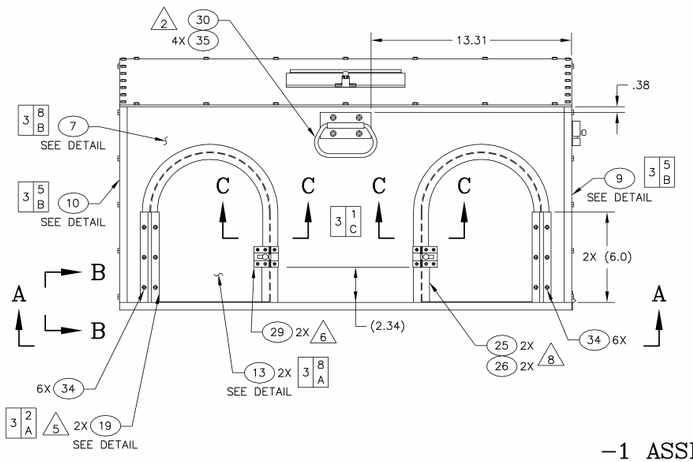
File: 626227.dwg
Path: H:\moody_grout-box\CHECK\
Date: 10/11/04 – 12:51 P.M. | Layout Name: Sheet 1
ID: RDH5

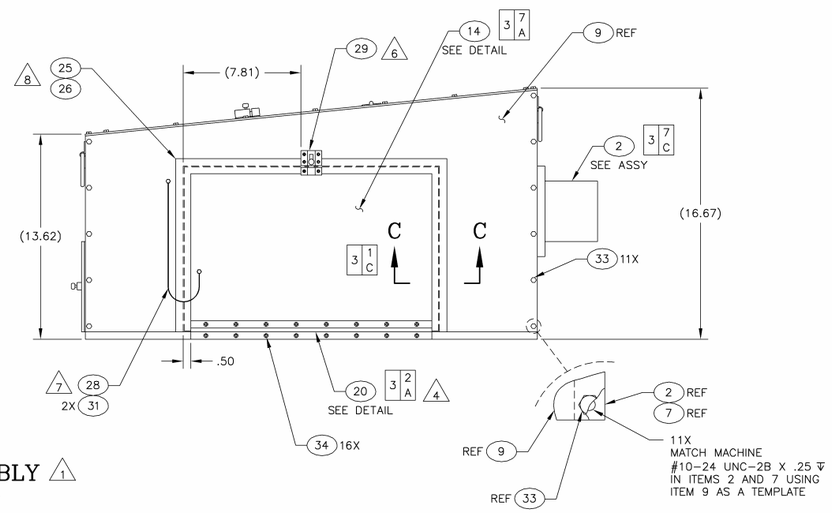




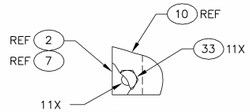


VIEW A–A
SCALE: 1/4





−1 ASSEMBLY 1
SCALE: 1/4



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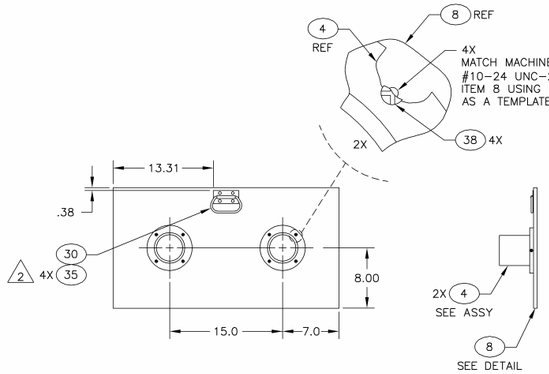

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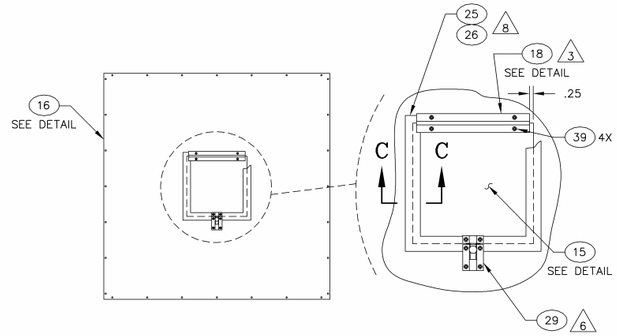

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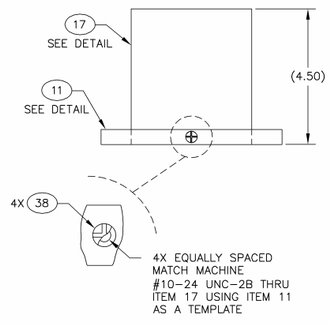

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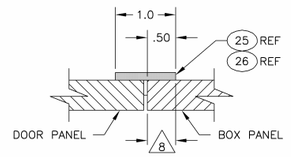

SECTION C-C

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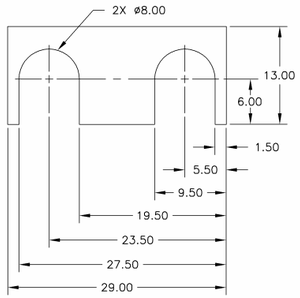

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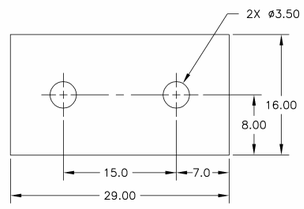

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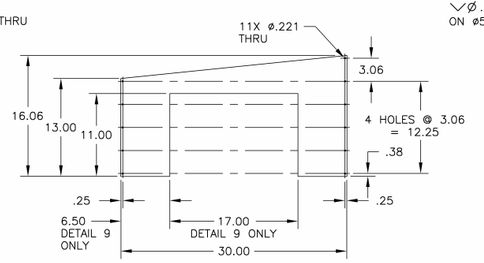

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DETAIL (10)

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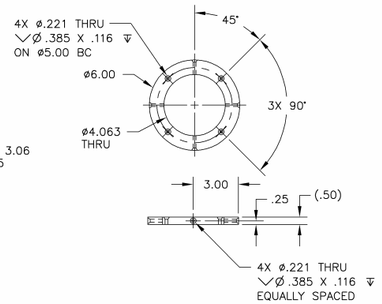

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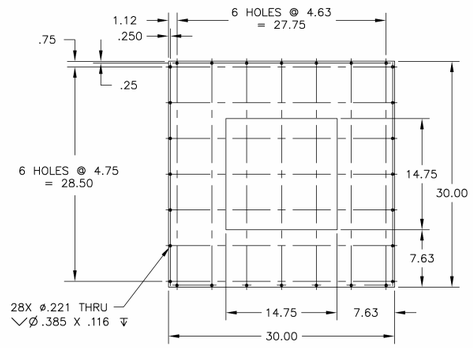

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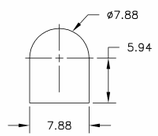

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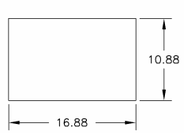

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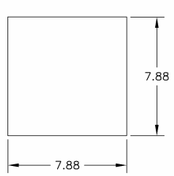

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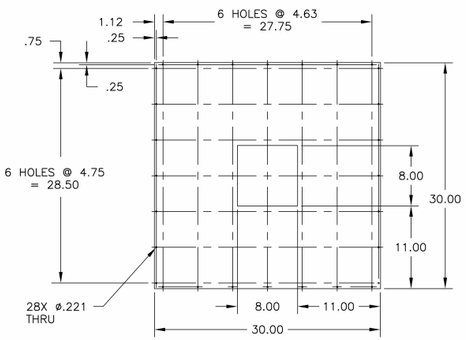

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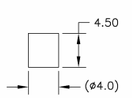

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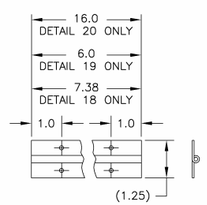

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DETAIL (19) NOTED

DETAIL (20) NOTED

SCALE: 1/2

SIZE	CAGE CODE	INDEX CODE NUMBER				DWG-626227	REV
		AREA	TYPE	CL	ORG		
D	01MF3	200	1688	41	090		
SCALE: NOTED						SHEET 3	

Attachment 3

Agency Comments and Comment Responses

DOCUMENT REVIEW, COMMENT, RESOLUTION LIST - EPA

Item	Section/ Figure/ Appendix	Page	Comment	INEEL Response
1.	Section 4.1.2	4-1	Note that if a LDR waste had been treated, the rinse water must be shown to meet LDR requirements prior to disposal in the evaporation ponds. This also applies to Section 5.3.3.	Rinsate and sludge will be sampled/analyzed to determine LDR acceptability once for each waste stream/batch recipe combination. All subsequent batches of rinsate will be processed based on these results and process knowledge.
2.	Section 5.3.5	5-8	The paragraph above Figure 5-3 is incomplete.	Text has been fixed.
3.	Section 5.4.1		Care and maintenance of the epoxy floor coating must be addressed. With the uses described here, there is a high probability of damage.	ICDF will comply with the requirement of the ICP Technical Interpretation 035 (ICP-TI-035), Secondary Containment Systems Maintenance and Repair, with the following exception: time period for repair. The ICDF Complex does not have a full time individual available to perform floor repairs. When other damage is noted during the weekly inspection, the damage will be protected from waste releases from the surrounding area before the end of the shift on the day of discovery. The protection can be the removal of all waste or the use of protective devices including, but not limited to berms, barriers and diking. Repairs will be conducted on a quarterly basis by an individual familiar with proper application of the coating material. In addition, it should be noted that a secondary containment system employing an HDPE liner system has been installed under the concrete floors in the building.
4.	Attachment 2	Att2-11	When this figure was copied, an extra piece of paper obscured some of the text.	Corrected copy will be provided.

DOCUMENT REVIEW, COMMENT, RESOLUTION LIST - EPA

Item	Section/ Figure/ Appendix	Page	Comment	INEEL Response
1.	Section 3.2	3-1	Debris Treatment last paragraph. Clarify estimated number of boxes that can be filled from one mixer batch of grout.	One box can be filled with one mixer batch of grout. The capacity of the boxes (4×4×8) is approximately 4 cu. yds. of material. The mixer capacity is approximately 3 cu. yds. With this update, an alternative grout mixing process with an independent grout mixer is being added. This system has a mixing capacity of 140 gallons and uses a variable rate pump. It is estimated that one batch of grout will fill one box (assuming the box is 80% full).
2.	Section 4.1	4-1	Waste Treatment (Soil Stabilization) Clarify what the statement that a P.E. has reviewed the information provides to the document.	This statement is included as required by the "OU 3-13 ROD page vii 3rd paragraph, which states, "Construct and operate an ICDF supporting complex, including a waste Staging, Storage, Sizing, and Treatment (SSST) facility, in accordance with the substantive requirements of IDAPA 16.01.05.008 (40 CFR 264 subparts DD, I, J and X) and IDAPA 16.01.05.006.01 and 16.01.05.006.02(40CFR 262.34[a][1]." 40 CFR 264.1101(c)(2) states,"Obtain certification by a qualified registered professional engineer that the containment building design meets the requirements of paragraphs (a) through (c) of this section."

DOCUMENT REVIEW, COMMENT, RESOLUTION LIST - EPA

Item	Section/ Figure/ Appendix	Page	Comment	INEEL Response
3.	Section 4.1.2	4.1	Pressure Washer 1st paragraph Clarify the selection of the one-hour used to decide if the mixer should be washed or not. Obviously if the material (cement mix) sets up, that is a concern and is the one-hour chosen to minimize the set up of the mix. Are you backing yourself into a corner by defining the time versus the mixer will be clean to avoid setting up of the material?	The one-hour limit is based on a recommendation from Besser, however, reference to this time frame has been deleted. Operational experience will be used to determine appropriate wash times.
4.	Section 4.1.2	4-1	Pressure Washer 1st paragraph Clarify the testing procedure of any solids and liquids generated during the washing of the mixer. If a LDR waste was treated in the mixer, the wash water and the solids will have to be tested via TCLP that they meet the LDR treatment standards for all waste codes processed. This testing must be done prior to discharge to the final respective disposal unit. In other words, the liquid cannot just be drained off the sump and pumped to the evaporation pond without testing.	Rinsate and sludge will be sampled/analyzed to determine LDR acceptability once for each waste stream/batch recipe combination. All subsequent batches of rinsate will be processed based on these results and process knowledge.
5.	Section 4.1.3	4-2	Box Tipper item #4 Clarify that the reversal of the sequence is done by the operator (manually) or by the Easy Blend Batching system. In other words, who or what does the reversing.	This is an automatic function. However, this operation can also be performed manually.

DOCUMENT REVIEW, COMMENT, RESOLUTION LIST - EPA

Item	Section/ Figure/ Appendix	Page	Comment	INEEL Response
6.	Section 4.1.4	4-2	Reagent Feed System Clarify the estimated capacity of a bag of reagents. Will a typical mix take one bag of product or how many batch mixes do you expect per bag of reagent. Clarify where you plan to keep the premixed bags reagents in storage, how many on site and an estimate of how long it may take to replace a reagent bag once empty. This will factor into your throughput estimate for processing.	The bags contain approximately 1 ton of reagent material. The number of batches treated per reagent bag will depend on the mix design. Reagent bags will be stored per the manufactures' recommendations. The minimum number of bags to be kept on site will depend on treatment mix and productivity. It is anticipated that at least one week's inventory will be kept at the ICDF in either a cargo container or in the decontamination bay. This is expected to be between 4 and 10 bags, again based on the particular recipe requirements and the moisture content of the soil to be treated.
7.	Section 4.1.5	4-3	Wheelabrator Air Scavenger System 3rd paragraph Clarify what the statement about the P.E. provides to the document. Is it because these units were designed outside of Idaho and you are providing a review per Idaho standards?	See response to #2 above.
8.	Section 4.1.6	4-3	Process Controls 1st paragraph Clarify if a list of the prerequisite conditions that the Easy Blend Batching System reviews for operation is noted or listed anywhere in the document. If not, can it be added to the Procedures Overviews? Clarify the type of devices that signal back to the Batching system that all systems are operational and mixing can proceed. Are they electric eyes, limit switches, etc.	A typical list of interlocks has been added to the overview.

DOCUMENT REVIEW, COMMENT, RESOLUTION LIST - EPA

Item	Section/ Figure/ Appendix	Page	Comment	INEEL Response
9.	Section 4.1.6	4-3	Process Controls 3rd paragraph Clarify the wording that implies once you manually dump the box into the mixer, lower the box and switch to manual mode, that the system will again lift the box and perform another dump cycle.	The paragraph states that after a manual dump or repeated manual dumps, the system will cycle the box for one more additional dump sequence when started in the auto mode.
10.	Section 4.1.6	4-3	Process Controls 4th paragraph Clarify where and how the reports may be generated off the Easy Blend Batching System. Will the data be electronically sent to the AOT or would you be required to download the data onto a disc and then take to the AOT for printout and document control? Does the system have battery backup to retain the data if a power failure occurs?	The Easy Blend Batching System has the capability to print directly to a printer or port data to a server/PC, however, this feature is not being utilized. All data will be manually recorded on a batch data log. The system does not have battery backup.
11.	Section 4.2	4-4	PCB Storage Container Confirm that power has been run to the PCB storage container to provide power for heating and lighting.	This has not been accomplished, however, no liquid PCB waste has been identified for storage. These connections are available and will be completed prior to cold weather storage of PCB waste.
12.	Section 4.3.1	4-4	Bulk Grout Mixer and Support Equipment Clarify if the section reference in last sentence is correct. Listed as “See section 4.2.”	Reference has been changed to 4.1.6

DOCUMENT REVIEW, COMMENT, RESOLUTION LIST - EPA

Item	Section/ Figure/ Appendix	Page	Comment	INEEL Response
13.	Section 4.3.3	4-4	Bulk Grout Hopper and Grout Pump Clarify if the discharge of the grout mix into the funnel type grout hopper will be through a tight fitting seal under the mixer. If the grout is a pumpable mix, it seems the discharge from the mixer into the funnel box could be a sloppy operation. Clarify the expected pumping distance of the grout from the funnel hopper to the box to be grouted. Will all grouting take place in the mixer room or will the funnel box be moved to the decon area? If so, is the funnel box provided with a lid to avoid spillage during transport?	There is no seal. The spacing between the bottom of the mixer and the top of the hopper is 1-2 ft. A splash curtain will be installed to minimize splashing outside the hopper. We expect to pump grout a distance of approximately 15-25 ft. Grouting will take place in the treatment area or the decon bay based on operational logistics at the time. No lid is anticipated as we do not believe we have the physical capability to move this system fast enough to cause sloshing and spillage during transport. This was proven when moving rinsate during mixer testing last winter (2003).
14.	Section 4.3.5	4-5	Contamination-Control Barriers 1st paragraph Clarification is requested on the design of the vent enclosure and its use. Simple sketch would be useful. Clarify if the vent enclosure would be needed or is to be used to filter the displaced air from the box as the void space is filled.	A drawing has been added for reference.
15.	Section 5.3.1	5-4	Clarify the approval sequence of the mix design. Does the chemist review the results of several lab tests, pick the best one and then pass that recommendation along with the other results up to the subcontractor and BBWI for final approval? Who does the chemist work for?	The mix design will be performed per DOE/ID-10903. The subcontractor will develop the recipe and test it in accordance with this test plan. The subcontractor shall use a test lab to develop the recipes. The chemists involved will work for this test laboratory. The BBWI Waste Specialist will review/approve the resulting recommendations provided in the required report of the respective treatability study.

DOCUMENT REVIEW, COMMENT, RESOLUTION LIST - EPA

Item	Section/ Figure/ Appendix	Page	Comment	INEEL Response
16.	Section 5.3.3	5-4	Disposal of Mixer Rinsate 8th bullet Provide further discussion on the control key system described in this bullet.	A single key is used in the Besser Treatment System. This key allows power to the mixer controls and cannot be removed unless power is secured. The same key is used on the mixer to unlock the access door panels. This provides an assurance of safety when the door panels are opened.
17.	Section 5.3.3	5-5	Disposal of Mixer Rinsate 5th bullet Clarify that prior to releasing any rinsate liquid to the evaporation ponds that the liquid is tested to confirm it meets the LDR wastewater treatment standards for the waste processed through the mixer. This assumes the water processed through the mixer is a waste needing treatment to meet LDR standards.	See response to #4 above.
18.	Section 5.3.4	5-5	Soil Treatment 1st paragraph Clarify how if the lids were removed from the boxes to aid in thawing potential rad or airborne issues would be handled.	Air monitoring will be performed as necessary to ensure personnel exposures are kept well below limits. This is the standard procedure for all soil work within the ICDF.
19.	Section 5.3.4	5-6	Soil Treatment #8 and #9 Clarify if the air scavenger system is operating while the box is being placed into the tipper system. Thought one procedure indicated when tipper access door is open the ventilation system starts up.	The system does not automatically start when the door is opened. Good practice dictates it be started manually if airborne hazards are probable, however, in many cases this will not be necessary.

DOCUMENT REVIEW, COMMENT, RESOLUTION LIST - EPA

Item	Section/ Figure/ Appendix	Page	Comment	INEEL Response
20.	Section 5.3.5	5-7	Debris Treatment 1st bullet Clarify if operating guidelines will or are being developed to determine the integrity condition. If developed, please provide.	This bullet exists to ensure the addition of concrete into the box does not cause enough pressure to compromise the integrity of the box. A stress analysis has been performed to determine the maximum liquid grout depth to ensure the integrity of the box is not compromised. The results of this testing has been added to this section.
21.	Section 5.3.6	5-8	Debris Treatment Acceptance 1st paragraph Since the evaluation of the effectiveness of the grouting of the debris boxes is an important issue with the DEQ, it is recommended that a video be taken of the entire process and made available for review by the agencies. This assumes the filling of the surrogate boxes are done prior to the Prefinal inspection. Another approach would be to notify the agencies of the test and allow them to be present during the process. Clarify the basis for the <5% of the visible exterior for acceptance of the void space issue.	We fully intend to video the process and have it available for your review. The 5% is based on two criteria: 1) the maximum visible void space per the O&M Plan in addition to the WAC, and 2) the debris treatment standard is to significantly reduce the leachability of the hazardous material from the debris. If less than 5% of the debris is exposed, then greater than 99% of the debris is thoroughly encapsulated. Note, this is very conservative and may not be achievable in actual practice. Visual observation during SO Testing will be used to determine practicality of this requirement.

DOCUMENT REVIEW, COMMENT, RESOLUTION LIST - EPA

Item	Section/ Figure/ Appendix	Page	Comment	INEEL Response
22.	Section 5.4.1	5-9	Decontamination Bay Discussion should be provided on the maintenance of the floor coating in the Decontamination Building. With the movement of equipment and placement of metal boxes on the floor, there is a high probability that the coating will be damaged. The floor condition is included in the weekly inspection, but the DEQ considers the coating to be critical in the protection of the concrete floor and therefore any damaged areas (missing coating, cracks greater than a hairline, etc.) need to be repaired as soon as possible. Based on similar issues at RCRA permitted facilities on the INEEL, repair time should not exceed 10 working days and the immediate area be taken out of service until repairs are made.	ICDF will comply with the requirement of the ICP Technical Interpretation 035 (ICP-TI-035), Secondary Containment Systems Maintenance and Repair, with the following exception: time period for repair. The ICDF Complex does not have a full time individual available to perform floor repairs. When other damage is noted during the weekly inspection, the damage will be protected from waste releases from the surrounding area before the end of the shift on the day of discovery. The protection can be the removal of all waste or the use of protective devices including, but not limited to berms, barriers and diking. Repairs will be conducted on a quarterly basis by an individual familiar with proper application of the coating material. In addition, it should be noted that a secondary containment system employing an HDPE liner system has been installed under the concrete floors in the building.

DOCUMENT REVIEW, COMMENT, RESOLUTION LIST - EPA

Item	Section/ Figure/ Appendix	Page	Comment	INEEL Response
23.	Section 8.1	8-1	Prefinal Inspection Checklist 1st paragraph Based on the current schedule for the Prefinal inspection (Jan 05), is this timing still within the "construction completion" intent? If the facility has been accepted and operational testing is being done, should this wording be modified to cover the existing situation or maybe clarify when DOE considers construction complete.	NE-ID considers construction complete at completion/approval of the critical decision (CD-4) (reference DOE O 413.3). This occurs after operational testing and an acceptable management evaluation of readiness. NE-ID did not provide this approval until acceptable resolution of the prefinal inspection action plan was reached - after completion of the ICDF pond and landfill.
24.	Section 9	9-1	Project Schedule Dates need to be revised per the current funding decisions.	New schedule has been added to the plan.
25.	Section 5	A-5	Appendix A: Decontamination Building Inspection Section 5 Implementation last paragraph Clarify if other procedures might include what time frame the operations manager is required to implement corrective action. Clarify what time frame is expected or required for the facility manager to review and approve the inspection report.	No predefined time frame is in the existing procedures (except for floor damage/cracks). The manager defines a time frame based on the severity of the issues identified. Text has been added which specifies that the facility manager or designee review and approve the inspection report by close of business on the day of the inspection.
26.	Section 5	A-7	Appendix A: Debris Treatment Section 5 Implementation 1st paragraph Need to add the ")" in the last sentence.	Change has been made as suggested.

DOCUMENT REVIEW, COMMENT, RESOLUTION LIST - EPA

Item	Section/ Figure/ Appendix	Page	Comment	INEEL Response
27.	Section 5	A-7	Appendix A: Debris Treatment Section 5 Implementation 3rd bullet Clarify that generally only two holes will be cut in the top of the box not 2 holes on each end of the box.	Text has been changed to state that a minimum of 2 holes will be cut in the top of the box. An evaluation of the contents during SO testing may indicate that multiple holes be cut for separate injection points to ensure thorough encapsulation of the waste.
		A-8	Appendix A: Debris Treatment Section 5 Implementation 6th bullet Clarify if a standard will be established for when grout is "set." Is it expected the interior will be firm or solid when the box is topped off or just surface (1" or 2") deep will be firm?	Just the surface needs to be solidified, and is all that is expected. This is to capture any floating debris so it is not exposed on the surface of the finished grout.
28.	Section 5	A-11	Appendix A: Soil Stabilization Section 5 Implementation 1st bullet Clarify that a liner will be installed in the roll-off box prior to placing under the mixer.	A liner can and may be used. Operational testing will determine the necessity of the liner. There is no intent to use a liner at this time.
29.	Section 5	A-11	Appendix A: Soil Stabilization Section 5 Implementation 6th bullet Suggest that when box is opened that liner would be opened and secured to box to assist in material releasing when dumped. Not sure if this is possible due to condition of liner or rad issue.	This is a good suggestion. It will be added to the overview as a good practice if conditions permit.
30.	Section 5	A-11	Appendix A: Soil Stabilization Section 5 Implementation 11th bullet Clarify waste tracking will be conducted to transfer waste location from the original container into the box under the mixer.	The OWTF will be used to track the amount of waste returned to the soil pile, collected as debris to be treated separately, and the disposition of treated soil.

DOCUMENT REVIEW, COMMENT, RESOLUTION LIST - EPA

Item	Section/ Figure/ Appendix	Page	Comment	INEEL Response
31.	Section 5	A-11	Appendix A: Soil Stabilization Section 5 Implementation 16th bullet Provide further clarification of how this process is expected to work. Would this transfer take place after the lab results are obtained? Provide comments on tracing of the waste movement.	A special "self tipping" container made for the purpose of dumping the contents will be used. See new text in section 4 and 5. We plan to consolidate 3-4 treated containers into a common RO/RO prior to receipt of TCLP results. The OWTF will be used to track the waste into the RO/RO and later into the landfill, after acceptable TCLP results have been received.